

NATIONAL WILDLIFE FEDERATION
WYOMING OUTDOOR COUNCIL
WYOMING WILDLIFE FEDERATION

IBLA 96-59

Decided October 8, 1999

Appeal from a decision to approve Texaco USA's Stagecoach Draw Unit natural gas field development program in the Green River Resource Area, issued by the Wyoming State Director, Bureau of Land Management. WY 1793 (420).

Affirmed.

1. Environmental Quality: Environmental Statements--
National Environmental Policy Act of 1969: Environmental Statements

NEPA does not require a particular result or course of action. The statute requires a fully informed, well-considered decision supported by reasonable forecasting and speculation. While an agency is required to take a hard look at the environmental consequences of a proposed action, a rule of reason is applied to determine whether an environmental statement contains a reasonably thorough discussion of the significant aspects of probable environmental consequences.

2. National Environmental Policy Act of 1969:
Environmental Statements

In considering the adequacy of an environmental impact statement, the Board will examine the mitigation plan, which must be complete and must contain a reasonably thorough discussion which explains the effectiveness of the specific mitigation measures.

3. Environmental Quality: Environmental Statements--
National Environmental Policy Act of 1969:
Environmental Statements--Oil and Gas Leases

In alleging a failure to consider the cumulative impacts of a natural gas development project, it is not sufficient merely to note the existence of other gas fields and gas development projects in Wyoming without concretely identifying the adverse impacts caused by such other fields and projects

to which the action being scrutinized will add. Where appellants have adduced nothing which negates or controverts the determination that air quality remains excellent and that applicable air quality standards have not been exceeded in the cumulative impact analysis area, they have failed to demonstrate a cumulative or synergistic impact on air quality which would give rise to an obligation to consider the environmental consequences of the project with those of any then-pending proposals.

4. Environmental Quality: Environmental Statements--
National Environmental Policy Act of 1969:
Environmental Statements--Oil and Gas Leases

Where the decision to allow mineral leasing on certain public lands was considered in the development of a Management Framework Plan with public comment and participation, and where BLM thereafter analyzed the significant environmental consequences of continued oil and gas leasing in a regional Environmental Assessment before any unit leases were sold, no site-specific Environmental Impact Statement is required prior to issuing individual oil and gas leases.

5. Environmental Quality: Environmental Statements--
National Environmental Policy Act of 1969:
Environmental Statements--Oil and Gas Leases

Once oil and gas leases are issued without surface occupancy restrictions, BLM cannot completely deny the right to drill and develop the leasehold, but it is required to fashion mitigation strategies and measures designed to reduce or eliminate adverse environmental impacts.

APPEARANCES: Susan Morath Horner, Esq., and Thomas D. Lustig, Esq., Boulder, Colorado, for Appellants; John F. Shepherd, Esq., Jane L. Montgomery, Esq., and Nanette J. Crawford, Esq., Denver, Colorado, for Intervenor Texaco Exploration and Production, Inc.; Andrea Gelfuso, Esq., Office of the Regional Solicitor, Denver, Colorado, for Bureau of Land Management.

OPINION BY ADMINISTRATIVE JUDGE PRICE

The National Wildlife Federation (NWF), the Wyoming Outdoor Council (WOC), and the Wyoming Wildlife Federation (WWF) ^{1/} have appealed the

^{1/} On Nov. 20, 1995, Texaco filed a Motion to Dismiss the appeal on the ground of lack of standing to appeal. By Order dated Nov. 25, 1996, this Board denied the Motion to Dismiss, but concluded that WWF lacked standing.

September 27, 1995, Record of Decision (ROD) of the Wyoming State Director, Bureau of Land Management (BLM), approving Texaco USA's (Texaco) natural gas field development program for the Stagecoach Draw Unit (Unit). ^{2/} The ROD approved Texaco's proposal to drill 72 wells on 320-acre spacing over the next 10 years. In addition, however, the ROD explicitly stated:

This decision does not authorize drilling on a 160-acre spacing or up to 144 wells. BLM recognizes that the Almond Formation has low porosity and permeability at Stagecoach Draw, and that to attain maximum ultimate economic recovery of the natural gas resource with minimum waste, in accordance with Federal Regulation (43 CFR 3162(a)), infill drilling on a well spacing of 160 acres may be necessary. [^{3/}] Authorization for further infill drilling will be contingent upon additional site-specific environmental analysis, including detailed geologic and reservoir engineering analysis demonstrating that a closer spacing is needed to avoid unnecessary waste of the natural gas resource.

(ROD at 1.)

On November 6, 1995, Appellants submitted a two-volume pleading containing their Notice of Appeal, Statement of Reasons (SOR), and Petition for Stay. ^{4/} In their SOR, ^{5/} Appellants allege that the ROD is premised upon legal and factual errors, and that it failed to consider substantial environmental questions. More particularly, it is contended that the ROD failed to consider "a host" of direct and cumulative impacts on wildlife

^{2/} The Unit comprises 23,575 acres situated in Sweetwater County, Wyoming, in T. 22, 23, and 24 N., R. 107 and 108 W. (Texaco's Stagecoach Draw Unit Draft Environmental Impact Statement released in March 1995 (DEIS).) The United States owns 98 percent of the surface and mineral estates, while the State of Wyoming owns the remaining 2 percent. (DEIS at i, 82.) Texaco formed the Unit in 1993 and is the operator. (Answer at 2.)

^{3/} We note that on Dec. 12, 1998, Texaco filed a pleading styled Motion to Allow BLM to Process An Application for In-fill Drilling While Appeal Is Pending Or, In the Alternative, For Expedited Consideration. Based upon information obtained from earlier wells, Texaco has concluded that to properly develop the reservoir, wells should be drilled on 160-acre spacing, and intends to submit an application to do so. By Order dated Mar. 16, 1999, the Board granted the request for expedited consideration, but denied the request to proceed with the application for infill drilling.

^{4/} The Petition for Stay was granted on a temporary basis by Order dated Dec. 14, 1995. It was extended by Orders dated Mar. 7, 1996, and Apr. 4, 1996. On Apr. 25, 1996, the Petition for Stay was denied.

^{5/} The Notice of Appeal is the unnumbered first page of the submission, the SOR is pages 1-47, and the Petition for Stay is pages 48-54.

and on air quality in the region, and that BLM postponed analysis of such impacts indefinitely while nonetheless authorizing development. (SOR at 8.) Appellants further argue that compliance with the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. §§ 4321-4370c (1994), is flawed in that BLM issued the Stagecoach Draw oil and gas leases without first conducting a NEPA analysis; that BLM's assertion that development cannot be postponed without impairing Texaco's contractual and Constitutional rights pending compliance with NEPA is in error; and that BLM's interpretation of the regulations requiring maximum development of gas reserves as a limitation on its ability to comply with environmental statutes, including mitigation of environmental impacts, also is incorrect. (SOR at 8.)

In support of the argument that BLM ignored cumulative impacts of the Decision, Appellants argue that "there is significant mineral development in almost every direction" around the "relatively pristine area" of Stagecoach Draw, and that this development must be included in any assessment of cumulative impacts. (SOR at 4.) Thus, it is noted that the Fontanelle gas field contains 1,070 producing wells and an additional 1,317 are under review; McMurry Jonah Prospect, where 20 wells are proposed, is 20 miles north; and Moxa Arch field is south of Fontanelle and contains 957 active wells and 1,325 new wells are under review. The Enron Burly field, the HS Resources exploratory development, the BIA/Bravo field, the Amoco Continental Divide Project, the Hay Reservoir Unit, the Greater Wamsutta II field and the Creston/Blue Gap field are also identified as development which must be considered in analyzing cumulative impacts. (SOR at 4-5.) Accordingly, NWF and WOC contend that "an agency may not segment the project from other similar or related projects, which, when added to the proposal under review, will have a cumulatively adverse effect on the environment." (SOR at 9.)

Appellants argue that BLM failed to adequately consider the impacts on wildlife, and on the Sublette pronghorn antelope herd in particular. The Sublette herd is the largest migrating herd of big game animals in the United States south of the Canadian border (§ 8, Ex. 2 to SOR), and the Unit area contains crucial winter/yearlong range for the herd. (DEIS at 59; § 8, Ex. 2 to SOR.) Appellants criticize the ROD for evaluating impacts to pronghorn and other large animals "primarily in terms of the direct forage lost through the construction of well pads and associated roads and pipelines." (SOR at 11.) BLM calculated a loss of 570 acres of crucial habitat. (DEIS at 95.) Although they do not attack BLM's acreage calculation, NWF and WOC allege that "[c]ursory attention is given to the indirect loss of habitat; the effect of disturbance on the utilization of habitat." They claim, moreover, that the only discussion of the utilization of habitat is a single sentence in the DEIS at 96. (SOR at 11.)

As further support for the contention that BLM failed to consider utilization of habitat, Appellants have provided exhibits in which it is concluded that displacement from customary habitat affects the pronghorns' metabolism; that energy expended by the animals in flight and avoidance and seeking alternative forage can exceed the animals' energy budget; and that increased energy expenditures can cause lower body weight and compromise

reproductive success. Appellants acknowledge the extent of such impacts depends upon the sensitivity of the species affected, the nature of the disruption, the characteristics and importance of the affected habitat, and the availability and condition of alternative habitat. (SOR at 11-12, citing Ex. 17, the U.S. Forest Service's (USFS) General Technical Report INT-191, Wildlife Management Implications of Petroleum Exploration and Development in Wildland Environments, by Marianne Bromley (1985), and Ex. 18, Ecosystem Wide Habitat Fragmentation by the Oil and Gas Industry in Southwest Alberta [Canada], by Brian L. Horejsi (1994).) Other impacts noted include harassment by petroleum workers, the existence of secondary roads, the availability of shelter, topography, poaching, vehicle collisions, habituation to human activity which makes the animals less wary and more vulnerable to poaching and collisions, and the effects of severe weather. (SOR at 12-15, citing Ex. 2, Affidavit of Dr. Stephen C. Torbit.)

Appellants further attack the Decision on the ground that BLM acknowledged that a number of threatened and endangered species potentially could exist in the Stagecoach Draw project area, but did not survey most of these species. NWF and WOC contend that it is BLM's position that where a species is not known to exist, it does not exist in the project area, and that on this basis BLM incorrectly concluded that impacts are negligible. The long-billed curlew and silky pocket mouse, discussed in the DEIS at 94, are cited as examples of this flawed analysis. (SOR at 16-17.) Appellants allege a failure to evaluate surrounding habitat and to analyze the migratory route of the Sublette antelope herd, and thus challenge the lack of a cumulative impact analysis of all the oil and gas development activity in the region. (SOR at 19.) In the same vein, it is argued that BLM cannot rationally admit that it lacks necessary data regarding the availability and carrying capacity of habitat and yet conclude that various mitigation strategies will minimize impacts. (SOR at 20-21.) Appellants argue that when it is difficult to obtain adequate data, BLM is obligated to "prepare a summary of existing and credible scientific evidence and an evaluation of impacts based upon generally accepted scientific approaches and research methods. [Citation omitted.]" (SOR at 21-22.) NWF and WOC therefore conclude that BLM's evaluation of impacts on wildlife is not entitled to this Board's deference. (SOR at 22-23.)

Appellants next contend that BLM incorrectly claims that air emissions from the Stagecoach Draw project cannot be quantified, and further contend that BLM failed to analyze the direct and cumulative effects on air quality. More specifically, Appellants argue that BLM's unsupported conclusion that no significant impacts will result from drilling activities on the Unit is belied by the experience at the Moxa Arch project, where emissions were at least generally quantified in the DEIS prepared for that project, an excerpt of which Appellants have provided as Exhibit 5. (SOR at 23-24.) They argue, moreover, that BLM failed to quantify and evaluate emissions associated with production activities, and that these will exist for the life of the project. (SOR at 24-25.) In sum, NWF and WOC argue that until BLM considers all the oil and gas and industrial development in the region as a whole, all of which is reasonably foreseeable, it has failed to rationally and thoroughly evaluate the cumulative impacts on

air quality. (SOR at 25-28.) Appellants thus conclude that BLM cannot lawfully authorize the project and yet postpone impact analysis and the development of mitigation strategies. (SOR at 28-29.)

With respect to alleged errors of law, Appellants believe that BLM is required to halt drilling until it has fully complied with NEPA, and that BLM's contrary conclusion that doing so would constitute a taking of Texaco's lease rights in violation of the Constitution is wrong. (SOR at 30-33.) In addition, they argue that NEPA required BLM to conduct a site-specific environmental analysis before issuing the Unit leases (SOR at 33-36), and that BLM abandoned its obligation to fully consider a no-action alternative when it issued the Unit leases and thereby irretrievably committed resources to the project. (SOR at 37-38.)

Appellants' final arguments are that BLM cannot tier the ROD to the Big Sandy Management Framework Plan (MFP), which they characterize as an outdated "collection of individual decisions, really more in the nature of objectives" (SOR at 39), or to the Big Sandy/Salt Wells Oil and Gas Leasing Environmental Assessment (Leasing EA), which by its terms projected oil and gas development activity only through 1991 and has been proven wrong in one of its assumptions. (SOR at 40.) These documents are an inadequate basis for the ROD because, according to NWF and WOC, "neither document was intended to make, nor did it make, any site-specific leasing or development decisions." (SOR at 40.) Appellants concede that the Leasing EA is more detailed than the MFP, but they argue that it "makes no effort to tie in its summary of possible impacts to specific lease areas, or to foreseeable development of any particular lease or leases." (SOR at 41.)

In its Answer, 6/ Texaco responds to Appellants by observing that compliance with NEPA is a means of achieving better decision-making, which is governed by a rule of reason. (Answer at 8.) Texaco contradicts Appellants' assertion that BLM's consideration of the impacts on antelope is cursory by citing relevant pages of the DEIS 7/ where the analysis is to be found, including citations offered to show, on a point-by-point basis, that BLM did not ignore or fail to consider the impacts discussed by Bromley (Ex. 17 to SOR), Torbit (Ex. 2 to SOR), and Horejsi (Ex. 18 to SOR). (Answer at 10-14.)

With respect to threatened and endangered species, Texaco cogently makes the point that Appellants' arguments fail to address the question of whether the Unit area contains the features required to provide suitable habitat for the species. Thus, citing the DEIS at 68-73, Texaco argues:

6/ In its Answer filed with the Board on Feb. 2, 1996, BLM formally joined in Texaco's Answer.

7/ In its Answer, Texaco referred to the DEIS. Although the FEIS identifies relatively minor changes as a result of comments received, these did not affect the overall quality of the environmental analysis or reasoning employed in the DEIS. Thus, for present purposes, citations to the DEIS and FEIS are interchangeable.

Bald eagles require cliffs, large trees associated with concentrated food sources, or sheltered canyons for nesting or roosting areas. [DEIS] at 68. Although there are some cliffs along the Big Sandy River, [DEIS] at 62, there is no habitat in the Stagecoach Draw Unit suitable for nesting or roosting. [DEIS] at 68. Similarly, peregrine falcons nest on tall cliffs, which do not exist in the project area. Id. And the scattered prairie dog burrows in the project area are not of sufficient size or density to constitute black footed ferret habitat. Id.

(Answer at 14-15.) Texaco therefore contends that conducting site-specific inventories for certain species makes little sense when there is no suitable habitat for most threatened and endangered species, and operations in some parts of the Unit area are years away or may never occur. According to Texaco, the more important point is that before it can initiate any on-the-ground activities, the necessary surveys will be completed, and if any threatened and endangered species are found, BLM will consult with the appropriate agencies and determine what activities are to be allowed under what conditions and subject to what mitigation measures. (Answer at 15.)

As to Appellants' challenges to the sufficiency of the DEIS with regard to air quality, Texaco responds that the Wyoming Department of Environmental Quality-Air Quality Division (WDEQ-AQD), the agency which regulates air quality for oil and gas activities, advised BLM that no air quality modeling would be required as part of its permitting process. Additionally, Texaco notes that the United States Environmental Protection Agency (EPA) formally stated its agreement that no modeling is necessary. Texaco's final point is that BLM reasonably could conclude that the project would not exceed applicable State and Federal air quality standards, based upon its considerable experience with oil and gas leasing in Wyoming. (Answer at 16-17.)

Texaco refutes Appellants' contention that an EIS should have been prepared before the Unit leases were issued by noting that neither NWF nor WOC commented on the Big Sandy/Salt Wells Oil and Gas Leasing EA when it was released for comment, and because neither protested or appealed the issuance of the leases to Texaco, a challenge is untimely. (Answer at 21-22.) Texaco distinguishes cases requiring the preparation of an EIS before an oil and gas lease is issued on the ground that they involved leasing in mountainous national forests having wilderness characteristics. (Answer at 22.)

Finally, Texaco dismisses Appellants' contentions regarding whether BLM can halt the Stagecoach Draw Unit project until a regional EIS is completed without unconstitutionally taking Texaco's lease rights as "over-blown," emphasizing that there is no "valid" reason to halt the project. (Answer at 24.)

We begin with Appellants' factual contentions. It is first argued that BLM failed to consider a number of cumulative impacts on wildlife and

threatened and endangered species, and on the Sublette antelope herd in particular. Specifically, Appellants fault BLM for analyzing only loss of habitat, and not indirect loss of habitat and utilization of habitat (SOR at 11), and as noted, they have submitted Exhibits 2, 17, and 18 to support their position. We do not believe that it fairly can be argued that BLM failed to consider the impacts described by Appellants and their expert sources. The EIS shows otherwise, as Texaco in its Answer notes, and while the EIS did not engage in the technical and more detailed discussion that appears in Appellants' exhibits, it was not necessary to do so to demonstrate that BLM has taken the requisite hard look at the environmental consequences of the action. In addition to Texaco's citations to the EIS, NWF's and WOC's allegation is further refuted by the extensive list of individuals, organizations, State and local governmental entities, and expert authorities BLM consulted or relied upon to reach its decision (EIS at 139-48), and by the discussion in the Leasing EA at 49-52, submitted as Appellants' Exhibit 22.

With respect to threatened and endangered species, NWF and WOC claim that BLM has taken the position that if a species is not known to exist in the project area, then it does not exist in the project area. (SOR at 16-17.) They assert that BLM has admitted that it lacks key data regarding antelope habitat, but nonetheless concludes that mitigation measures will be effective. We do not agree with Appellants' characterization of the portions of the DEIS and FEIS on which they rely. It is correct that BLM acknowledged that it had not surveyed some threatened and endangered and special status species and that there may be a loss of potential habitat. BLM also noted the reasons why it had concluded that the habitat was not likely to prove suitable for certain species, a point Appellants have not disputed.

In addition, however, BLM generally described the mitigation measures required for each threatened and endangered and special status species (DEIS at 99-100), which include applicant-committed practices under the Preferred Alternative, more fully described in section 2.1.12 (DEIS at 26-28) and 5.0 (DEIS at 129-38); a buffer zone for certain species; and the prohibition against on-the-ground activity until surveys are completed as part of processing an application for permit to drill, right-of-way application, or other authorization. If threatened and endangered or special status species are found in the area, then BLM, the U.S. Fish and Wildlife Service (USFWS), and Texaco must reach agreement regarding what activities are to be allowed and what conditions will govern such activities. (DEIS at 135-36.) Appellants do not address the specifics of these mitigation strategies and ongoing monitoring, or the impact they will have in reducing expected impacts.

Appellants' further argue that the absence of data does not justify assuming that impacts to wildlife will be minimal. They rely upon two examples. Specifically, NWF and WOC point to BLM's statement relating to the Sublette antelope herd by which BLM generally acknowledged that it lacked good scientific data with respect to the availability and capacity of habitat. (DEIS at 95.) In addition, Appellants rely upon BLM's response to the Wyoming Game and Fish Department's (WGFD's) letter dated

April 1, 1995, commenting on the DEIS. WGFD's Comment 1, which BLM designated 8.1 in the FEIS in its point-by-point responses to comments, advised BLM that in 1993 the State had revised its Sublette antelope herd management objective from 30,000 head to 40,000 head. Thus, WGFD's comment was that it was incorrect to speak of the objective as a proposal when in fact it had been adopted by the State, and that BLM should use the higher population objective for certain calculations related to impacts appearing on pages 95, 98, and 122 of the DEIS. BLM's response was as follows:

Comment: 8.1. - BLM has not concurred in an increased Sublette antelope herd population objective (from 30,000 to 40,000 animals) for habitat management reasons. BLM cannot concur because any increase must be based on the availability and capability of the habitat on public lands to support higher numbers. This habitat information is not available.

As a multiple use management agency, BLM must manage public lands not only to meet reasonable big game population objectives, but also to meet the nation's burgeoning demands for minerals, water, grazing, recreation, etc. All these needs must be taken into consideration in conjunction with any proposal for increasing population objective levels. In accordance with the Memorandum of Understanding between BLM and WGFD, BLM will cooperatively work towards the determination of appropriate population objectives based upon the availability of habitat and its capability to handle present or increased numbers in conjunction with other demands.

However, to make it clear that WGFD has increased its population objective, the second sentence under Pronghorn on page 59 has been modified to read as follows: * * *.

(FEIS at 14.) BLM's position is further illuminated by the brief discussion of the mission of WGFD as compared to that of BLM. According to BLM,

WGFD manages big game species on a "herd unit" concept. This management strategy is designed to maintain a desired population objective in order to provide a desired harvest, success rate, and quantity of recreation days. Objectives are determined according to both political and biological realities. * * * WGFD herd unit objectives are not typically set at a number that strictly reflects biological carrying capacity of the habitat. In most cases, objectives for big game populations are somewhat lower than what the range could support, and carrying capacity varies considerably from year to year, depending especially upon weather.

(DEIS at 121-22.) It is thus clear that WGFD's comment pertained to a related but entirely different point from the one for which it was offered by Appellants, and on that basis, we reject the argument.

Appellants' second example likewise requires us to provide the complete context of the sentence quoted. The DEIS acknowledges that all of the proposed Stagecoach Draw development would be within crucial winter/yearlong antelope habitat. The project area is 23,575 acres of 799,123 of the crucial winter and winter/yearlong range for the Sublette herd, or approximately 3 percent. (DEIS at 59.) BLM believes that the direct loss of habitat would be 570 acres of such habitat, 270 acres (47 percent) of which would be for the life of the project; 108 acres (19 percent) would be reclaimed during the first appropriate season after initial disturbance and would not become available for forage for some years; and the remaining 192 acres (34 percent) would be lost as a result of construction of the pipeline gathering system, with grasses and forbs quickly revegetating the area for spring/summer/fall forage, but the shrubs necessary for winter forage would be years in returning. BLM concluded:

The 570 acres of crucial winter and crucial winter/yearlong habitat that would be lost for some period of time represents 0.07% of the crucial winter and crucial winter/yearlong habitat in the Sublette antelope herd area. Good scientific data regarding the carrying capacity of crucial winter and crucial winter/yearlong habitats in the Sublette antelope herd are not available on which to base an estimate of the reduction in carrying capacity that this 570 acres loss would represent. If, however, it is assumed that the 799,123 acres of crucial winter and crucial winter/yearlong habitat in the Sublette herd area has a carrying capacity of 30,000 antelope, then each antelope would require 27 acres of such range, and crucial winter and crucial winter/yearlong habitats could support 24 antelope/mi². The loss of 570 acres * * * would reduce the carrying capacity by approximately 21 antelope. This loss assumes that the carrying capacity of the crucial winter and crucial winter/yearlong habitat is 30,000 animals. It also assumes that antelope numbers are directly related to the extent of crucial winter habitats. It is impossible to accurately quantify the number of animals that could be lost due to the Stagecoach Draw project. It could be greater or less than 21 animals.

(DEIS at 95; Compare DEIS at 121-22.)

Rather than demonstrating how and why BLM's assumptions or reasoning are unsound, Appellants allude to "a body of well-defined scientific thought concerning negative impacts on wildlife" which BLM "completely ignored" (SOR at 22), and suggest that BLM's conclusions lack any scientific support whatsoever. However, apart from assertions that more surveys, studies or modeling should have been undertaken before the project could be approved, no contrary scientific evidence, data and findings are offered which would vitiate BLM's reasoned conclusions, nor have Appellants articulated exactly what they believe is necessary to achieve "an understanding of the ultimate effects this development will have on wildlife

populations." (SOR at 22.) As noted, Appellants have submitted three exhibits which discuss the nature of the impacts that antelope and elk may experience in varying degrees in response to various disturbances, displacement, and conditions. Contrary to NWF's and WOC's assertion, these were considered by BLM. See DEIS at 95-96, 121-123, 135. They nonetheless cite Methow Valley Citizens Council v. Regional Forester (Methow Valley), 833 F.2d 810 (9th Cir. 1987), rev'd on other grounds sub nom. Robertson v. Methow Valley Citizens Council, 490 U.S. 332 (1989), as an illustration of "the irrationality of reaching conclusions on wildlife impacts in the face of nonexistent data." (SOR at 21.) The case is distinguishable on its facts.

In Methow Valley, USFS granted a special use permit to a developer for the purpose of providing "a winter sports opportunity." The developer intended to construct a year-round destination ski resort at Sandy Butte, Washington, even though the permit itself was not tied to any specific parcel of land, prompting the court to question why USFS was "wedded exclusively to the development of Sandy Butte." Methow Valley, supra at 815. The court faulted USFS for failing to consider the permanent residential and commercial development that would follow development of the resort and the impact it would have on a variety of natural resources, including impacts on a mule deer herd, and for failing to consider other locations or the possibility of expanding existing facilities. The court had concluded that the proposed project would "cut off the deer herd's migration route, usurp fawning and staging areas and eliminate winter range -- all of which are vital to the herd's survival." Methow Valley, supra at 817. Thus, it rejected USFS' assertion that the impacts to mule deer would be minor as a result of mitigation, which the court found was described in "very general terms, lacking both a detailed description of required or possible mitigation measures, and any analysis as to the effectiveness of these measures," because "not only ha[d] the effectiveness of these mitigation measures not yet been assessed, but the mitigation measures themselves ha[d] yet to be developed." Methow Valley, supra at 817, 819. Moreover, USFS' own witness testified at trial that the agency's data in support of this conclusion was inadequate, and this was borne out by the fact that USFS was then engaged in preparing a comprehensive study of the herd. Accordingly, the court concluded that "just as the subsequent preparation of mitigation measures will not cure a deficient EIS, neither will a subsequent study providing information essential to assessment of the environmental impacts of a proposed action and its alternatives." Methow Valley, supra at 817.

Unlike Methow Valley, however, BLM has considered reasonable alternatives to the proposed action, considered obvious and more subtle impacts to wildlife, and prepared and explained a number of mitigation measures, all in advance of approving the action. Since the record provides little to buttress Appellants' factual assertions regarding BLM's consideration of impacts to wildlife, what remains of the argument is an inference that BLM cannot have considered available data and literature, because had BLM done so, it would have reached different conclusions as to the degree of impact, that is, the same conclusions as Appellants.

[1] Appellants' argument fails to recognize that NEPA does not compel a particular result or course of action, mandating only a fully informed and well-considered decision. 40 C.F.R. § 1500.1(b); Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc., 435 U.S. 519, 558 (1978); National Wildlife Federation, 145 IBLA 348, 359 (1998). Second, NEPA does not demand the certain knowledge that Appellants would insist upon as a condition precedent to approving the Texaco project. Only reasonable forecasting and speculation is required by NEPA. City of Davis v. Coleman, 521 F.2d 661, 676 (9th Cir. 1975), citing Scientists' Institute for Public Information v. A.E.C., 481 F.2d 1079, 1092 (D.C. Cir. 1973). Thus, whether BLM is able to know and quantify precisely the "ultimate effects" of development -- in this case, how many more or fewer than 21 animals will be lost as result of the project -- is a very different question from whether BLM adequately considered and made a reasoned assessment of environmental impacts. NEPA requires an agency to take a hard look at environmental consequences, and this BLM has done. National Wildlife Federation, *supra*. In deciding whether an EIS meets the purposes of NEPA, a rule of reason is applied to determine whether the EIS contains a "reasonably thorough discussion of the significant aspects of the probable environmental consequences" of the proposed action. National Wildlife Federation, *supra*, citing Natural Resources Defense Council v. Hodel, 819 F.2d 927, 929 (9th Cir. 1987). We are satisfied that the EIS presented a reasonably thorough discussion of environmental consequences of the Stagecoach Draw project, including the points raised by Appellants' submissions.

[2] Further, Appellants' argument fails to take into account the mitigation goals and strategies which are expected to reduce or minimize overall impacts. "The importance of the mitigation plan cannot be over-estimated. It is a determinative factor in evaluating the adequacy of an environmental impact statement. Without a complete mitigation plan, the decisionmaker is unable to make an informed judgment as to the environmental impact of the project -- one of the main purposes of an environmental impact statement." Oregon Natural Resources Council v. Marsh, 820 F.2d 1051, 1055 (9th Cir. 1987). More than simply listing mitigation measures, an EIS must contain a reasonably thorough discussion of such strategies which explains the effectiveness of the measures. Oregon Natural Resources Council v. Marsh, *supra*. The DEIS and FEIS include specific mitigation measures, such as seasonal restrictions, buffer zones, and prohibitions against certain structures and activity, for example; monitoring; local site assessments of environmental impacts in connection with specific authorizations, which may include imposition of further conditions, restrictions, or prohibitions as appropriate; numerous stipulations governing surface disturbance, reclamation, and drilling; and the imposition of additional restrictions if information obtained from other, larger projects warrants it. Appellants do not directly challenge the mitigation plan in general, and certainly do not address the impact of specific measures on their concerns or on BLM's conclusions that overall direct and indirect impacts to wildlife are negligible. (DEIS at 127.)

Appellants' final point in this line of argument is that the ROD and underlying EIS are not entitled to deference for three reasons: BLM ignored "well-defined scientific thought;" it admitted that it does not understand the "ultimate effects" of the project on wildlife; and USFWS has challenged the accuracy of BLM's assertion in the DEIS that wildlife impacts are negligible, as demonstrated by a paragraph from page 4 of USFWS' comments dated March 24, 1995. Having addressed the first two assertions in the discussion above, we will consider the third. USFWS' comments, designated as Comment 11-8 for purposes of BLM's response, were as follows:

Page 95, 4.11 Wildlife and Fisheries, page 121, 4.25.2.11 and Table 4.6 - The environmental consequences of the proposed action focus on the direct effects of acreage of habitat lost. I concur, that from a landscape perspective, the proposed project will affect a relatively small amount of land. However, indirect impacts associated with wildlife displacement and disruption probably have substantially more impact. The draft EIS suggests that for most species there is some unquantifiable amount of indirect impact, but discounts these impacts as negligible. If these impacts are truly unquantifiable, then how can the Bureau determine the "negligible" level of impact. [Sic] As written, the draft EIS is misleading and presumes the proposed action will have negligible impacts, when in fact the impacts for most species are not known.

BLM responded as follows:

Comment: 11.8 - Within the Stagecoach Draw Unit indirect impacts are acknowledged and would occur at their highest levels during construction and drilling. Although indirect impacts are unquantifiable, through professional judgment, we can deduce that -- (1) given the behavioral characteristics of antelope and other wildlife and (2) given the implementation of the identified mitigation measures -- the impacts from the proposed project should be negligible within the Stagecoach Draw Unit (Section 4.11.2.1 Big Game/Other Animals, page 96). However, when considered cumulatively with other present and reasonably foreseeable development, we can deduce that anticipated impacts would be moderately adverse during the development stage, becoming negligible as development activity slows (Section 4.25.2.11 Wildlife and Fisheries, page 121). Nevertheless, studies are needed to document the precise indirect effects of this human activity.

(FEIS at 18-19.) To admit that BLM does not possess precise knowledge -- whether 17 or 71 animals will perish as a result of low birth weight attributable to harassment by project workers, for example -- is not tantamount to an admission that BLM lacks sufficient information or experience to reach a reasoned conclusion regarding likely overall impacts based upon the knowledge and data that are available. A more objective

consideration of the comment and response, read against the background of the discussions at DEIS at 95-96, 121-23, 135, Tables 4.6 and 4.7, and Appendix G to FEIS, convinces us that it merely urged a further clarification to avoid the appearance of an inconsistency or misleading impression. That interpretation appears to be borne out by the absence of any further comment on the point in USFWS' August 22, 1995, comments on the FEIS. (ROD for EIS, Appendix E.) Thus, we are not persuaded that the cited exchange between USFWS and BLM supports Appellants' contentions.

Appellants' second factual argument concerns air quality. Specifically, four points are asserted. First, error is alleged in the failure to analyze direct impacts and to quantify emissions from drilling and production activities by appropriate computer modeling. (SOR at 23-25.) Second, it is alleged that the finding of no significant impact on air quality is undermined by the quantification in general terms of the potential emission rates for various air pollutants at the Moxa Arch project. (SOR at 24, citing Ex. 5 to SOR.) The final arguments are that BLM failed to consider the cumulative impacts of all other mineral and oil and gas projects on air quality, and that BLM cannot properly postpone a cumulative analysis or development of mitigation measures. (SOR at 28-29.) The DEIS states that the project is a Class II air quality area, a classification which allows development and limited increases in certain pollutants, provided such increases do not exceed the National Ambient Air Quality Standards (NAAQS). The DEIS further states that the principal ambient air pollutant in the project area is particulate matter, attributable to a variety of natural and industrial sources, including natural gas development activities. However, the DEIS also states that there are no known violations of Class II air quality standards (DEIS at 37), and this is not disputed by NWF and WOC.

Moreover, while BLM acknowledged growing concern regarding the potential for increases in certain emissions on the part of the WDEQ-ADQ, "[t]here are no known or suspected exceedances of NAAQS's or Class 2 Prevention of Significant Deterioration (PSD) increments for NO_x [oxides of nitrogen] in the county at this time * * *." (DEIS at 38.) BLM also acknowledged temporary increases in unquantifiable amounts of certain pollutants at some locations as a result of various development activities, but noted that impacts on air quality are not considered significant until they violate Federal or State air quality standards, and that it is WDEQ-ADQ which would issue air quality permits for the construction, testing, and operation of equipment and facilities, as appropriate. (DEIS at 87-88.) WDEQ-ADQ apparently does not anticipate air quality modeling in connection with the permitting process, because no significant impacts are anticipated. (DEIS at 88.) Again, none of these points are directly disputed by Appellants, although they question BLM's representation that no modeling will be required in the course of WDEQ's air quality permitting process.

Regardless of whether BLM should have been more specific in identifying the source of the representation, the fact is that WDEQ formally commented on the DEIS, and it did not voice any concern about impacts to

air quality as a result of the project. (FEIS at 11.) We therefore cannot say that BLM's inference that impacts are not significant is plainly wrong. The EPA agrees with BLM's inference. (FEIS at 16.) As a result, it was neither unreasonable nor reversible error to determine not to require air quality modeling at this time. This conclusion accordingly disposes of Appellants' contentions with respect to emissions from production activities, as distinct from drilling and completion activities. As to the air quality modeling to be performed in connection with Moxa Arch, we agree with Texaco and BLM that the experience at that project does not necessarily undermine the reasoning of the Stagecoach Draw ROD or DEIS/FEIS. Moxa Arch is a much larger project with 35 times the number of wells proposed for the Stagecoach Draw project, yet it appears that no Federal nor State air quality standard has been exceeded (Answer at 17), assertions not contested by Appellants.

The third leg of NWF's and WOC's claims regarding air quality is that BLM failed to consider the "thousands of additional wells" that are to be drilled in southwest Wyoming over the next 20 years. Appellants contend that these wells "will result in significant air pollutant emissions, which will cumulate over time." They further note that development of trona, uranium, coal, and coalbed methane also will increase in the same period and contribute air pollutants. (SOR at 26.) Thus, it is alleged that the ROD and DEIS/FEIS have "failed completely" to address the cumulative effects of all such industrial activity. (SOR at 27.) This is not supported by the record. See DEIS at 30, 37-38, 87-88, 112, 119, 131.

[3] The cumulative impact analysis area comprises 1,004,080 acres, and for the most part extends well beyond the Unit boundaries and includes several other units and fields, including some of those identified by Appellants. (DEIS at 111-15, 119.) It also includes the basin-wide airshed and the Class I airshed for the Bridger and Fitzpatrick Wilderness Areas. As noted, it is uncontested that "[e]xisting air quality in the area is generally excellent." (DEIS at 119.) Appellants instead generally argue that the potential air pollution from all other sources can severely impact air quality. ^{8/} However, it is not sufficient merely to note the existence of other gas fields and gas development projects in Wyoming without concretely identifying the adverse impacts caused by such other fields and projects to which the action being scrutinized will add. Wyoming Outdoor Council, 147 IBLA 105, 109 (1998). Here, the incremental

^{8/} They also contend that BLM omitted mention of two pending pipeline proposals. As Appellants' own Exhibit 16 shows, one of those proposals is to be subjected to its own environmental analysis, and in the absence of any specific allegation or evidence relating to the nature and extent of potential emissions associated with the other proposed pipeline to counter the conclusion that no Federal or State air quality standard has been exceeded at Moxa Arch or any other natural gas field or unit within the cumulative impact analysis area, we find no error in BLM's failure to mention the pipeline.

impact of the Stagecoach Draw Unit project is not expected to be significant, and although a moderately adverse short-term increase in oxides of nitrogen and particulates is anticipated, these will decline to negligible impact as construction activities decline, and in any event such emissions will be subject to Class 2 PSD increments. (DEIS at 38, 119.) Moreover, should the Fontanelle and Moxa Arch EIS' identify any further measures to mitigate cumulative impacts on air quality, or should WDEQ-ADQ require additional measures, they also will be imposed on Texaco. (ROD at 13.) 9/ Appellants have adduced nothing which negates or controverts the determination that air quality remains "generally excellent" (DEIS at 37) in the cumulative impact analysis area, and that applicable air quality standards have not been exceeded (DEIS at 37-38). In the absence of such evidence, Appellants have failed to demonstrate a cumulative or synergistic impact on air quality which would give rise to an obligation to consider the environmental consequences of the Stagecoach Draw project with those of any other proposed project pending before the agency. Sierra Club v. Kleppe, 427 U.S. 390, 410 (1976); Southwest Resource Council, 96 IBLA 105, 121, 94 I.D. 56, 65 (1987).

NWF and WOC also raise an argument regarding improper segmenting and the obligation to complete a regional EIS before authorizing Texaco to proceed. The present case is not, because of the fact of other natural gas development in Wyoming, like the "segments of a proposed highway, which must be considered as part of one major federal development program [citation omitted]." Natural Resources Defense Council v. Calloway, 524 F.2d 79, 87-88 (2d Cir. 1975). It cannot fairly be said that all the existing and proposed projects and fields in southwestern Wyoming are so interdependent that it would be irrational or unwise to undertake one project if the other projects were not also undertaken. Cf. Concerned Citizens for Responsible Mining (On Reconsideration), 131 IBLA 257, 265-66 (1994), citing Thomas v. Peterson, 753 F.2d 754, 758-59 (9th Cir. 1985).

With respect to their legal arguments, NWF and WOC contend that "there is no authority for the proposition that postponement of drilling activity to comply with NEPA would give rise to a taking." (SOR at 31.) They further argue that BLM should have conducted an environmental analysis before issuing the leases involved in the Unit, and that BLM failed to consider a no-action alternative, having "relinquished" the ability to do so by issuing the leases. (SOR at 33-38.) In advancing this contention, Appellants challenge BLM's reliance on the Big Sandy MFP and the Big Sandy oil and gas leasing EA, arguing that neither furnishes an adequate basis for the ROD. (SOR at 38-41.) To buttress their contentions, they have submitted excerpts from both documents as exhibits in Volume II of their pleadings. As a preliminary matter, we observe that tiering is not only permitted, it is encouraged "to eliminate repetitive discussions of the

9/ The FEIS' for the Moxa Arch and Fontanelle will include the Stagecoach Draw Proposed Alternative and Alternative A, and will also include impacts on the Bridger, Fitzpatrick, and Popo Agie Wildernesses. (ROD at 13.)

same issues and to focus on the actual issues ripe for decision at each level of environmental review." 40 C.F.R. § 1502.20; Southern Utah Wilderness Alliance (SUWA), 124 IBLA 162, 167-68 (1992). The issue therefore is whether the MFP and the Leasing EA contain any data, analysis or findings that are relevant to the Stagecoach Draw FEIS, such that tiering was appropriate.

Appellants dismiss the MFP on the ground that it lacks site-specific leasing decisions. This argument misses the mark. The Resource Management Plan (RMP) is the successor of the MFP, 43 C.F.R. § 1610.8, and it is considered a major Federal action significantly affecting the quality of the human environment, the approval of which therefore requires the preparation of an EIS. 43 C.F.R. § 1601.0-6. Both are land use plans in which, among other things, "[a]llowable resource uses (either singly or in combination) and related levels of production or use to be maintained" are designated, including a decision whether and to what extent mineral leasing is to be allowed. An MFP or RMP is not, however, "a final implementation decision on actions which require further specific plans, process steps, or decisions under specific provisions of law and regulations." 43 C.F.R. § 1601.0-5(k)(2), final paragraph. Thus, an MFP or RMP is not the document in which any site-specific or individual leasing decisions would be made.

An MFP properly may serve as the basis for decision-making until it is superceded by an RMP, provided it is consistent with the principles of multiple use and sustained yield, and was developed with public participation and Government coordination, even if the public participation and coordination did not occur in the manner prescribed in 43 C.F.R. §§ 1610.2 and 1610.3 relative to RMP's. As initial environmental reviews for the leasing, exploration and proposed development of mineral resources were conducted during the land use planning process with public participation, and conformity with the principles of multiple use and sustained yield has not been called into question (ROD for EIS at 12), this claim is rejected.

As to the Leasing EA, NWF's and WOC's chief complaint is that it projected oil and gas activity only through 1991, and that it wrongly anticipated a decline in oil and gas in the area after 1987 because of increased interest in coal and sodium. As they did with respect to the MFP, Appellants perceive error in the lack of "effort to tie its summary of possible impacts to specific lease areas, or to foreseeable development of any particular lease or leases." (SOR at 41.) However, the purpose of the Leasing EA was to describe and analyze the present and probable future cumulative impacts of oil and gas exploration, development, and production in the Big Sandy and Salt Wells Resource Areas, a region comprising approximately 5 million acres in 5 counties in southwestern Wyoming. Tentative land use decisions pertaining to continued oil and gas leasing had been made earlier in 1987, and the Leasing EA was designed to provide the analysis to be used in making final decisions. The document was programmatic in nature and expressly "[did] not analyze specific well sites or other specific practices," the stated primary purpose being "to identify overall and cumulative impacts of an assumed rate and type of development." (Leasing EA at 1, Ex. 22 to SOR.)

Regardless of whether BLM was able to accurately foresee the turns in the tide of mineral development in southwestern Wyoming or not, the important question is whether the basic data, analysis, or reasoning of the EA retains any validity for any purpose useful to the Stagecoach Draw EIS. Appellants bear the burden of demonstrating the particulars of why the Leasing EA is obsolete, and to do so requires more than noting that its projections were not intended to go beyond 1991. Indeed, NWF and WOC have not articulated or provided anything that would lead us to find that the cumulative impact analysis contained in the Leasing EA has lost its legitimacy. Accordingly, it was entirely appropriate for BLM to tier to the documents in which the appropriateness of continued oil and gas leasing and the circumstances under which it would continue were considered and analyzed with public comment and participation. SUWA, supra.

Appellants' concern regarding the need to examine the cumulative impacts from all mineral and industrial activity over the coming decades is well-taken, and it is a concern shared by the State and by BLM. Indeed, BLM has undertaken a regional assessment in the form of the Southwest Wyoming Resource Evaluation, which, among other things, will examine unanticipated or unpredictable effects, including off-site impacts; determine the effectiveness of mitigation measures; determine the status of established threshold levels; and evaluate what is necessary to achieve or maintain consistency with the plans or programs of State and local government and Native American tribes. (FEIS at 17.) The Southwest Wyoming Resource Evaluation seeks information that ultimately may shed light on conclusions or expectations set forth in the EIS, but it is not, and does not purport to be, a substitute for project- and site-specific environmental analysis, and it does not negate the land use planning and programmatic analyses performed in connection with the MFP and Leasing EA.

Appellants nonetheless argue that BLM should have conducted an environmental analysis before issuing the Stagecoach Draw Unit leases to ensure that a no-action alternative could be considered. (SOR at 33-38.) Sierra Club v. Peterson, 717 F.2d 1409, 1410, 1414 (D.C. Cir. 1983); Conner v. Burford, 836 F.2d 1521, 1526, 1530-31 (9th Cir. 1988); and Bob Marshall Alliance v. Hodel, 852 F.2d 1223, 1227 (9th Cir. 1988), are cited in support of the contention that an EIS was required before the Unit leases could be sold. These cases stand for the proposition that an environmental analysis must be conducted before a competitive oil and gas lease is issued, unless the Government retains the authority to preclude all surface-disturbing development.

[4] In the present case, however, BLM analyzed the environmental consequences of continued mineral leasing before it issued the Unit leases. The initial determination regarding which public lands were to be open to mineral leasing was made in the MFP, and this was subject to public comment. Stagecoach Draw was among the lands designated for leasing, with various protective conditions and stipulations. Thereafter, the Leasing EA served as the mechanism by which environmental consequences and cumulative impacts of oil and gas leasing in the area were analyzed and additional protective measures to ensure minimal impacts were developed, and

that analysis was completed before any Unit lease was issued to Texaco. (ROD for EIS at 12, Appendix E at 4-5, 6-7; Answer at 21-22.) Where BLM has previously analyzed the significant environmental consequences of mineral leasing, no site-specific EIS is required prior to issuing an oil and gas lease. Colorado Environmental Coalition, 142 IBLA 49, 52-53 (1997). Moreover, Appellants evidently neither commented on the Leasing EA nor protested issuance of Texaco's leases, and thus the time for contesting issuance of the leases has long since passed. Southern Utah Wilderness Alliance, 122 IBLA 165, 172 (1992).

[5] Since the leases have been issued, absent a nondiscretionary statutory prohibition against drilling, BLM cannot now deny the right to drill and develop the leasehold. Only Congress can completely prohibit development activities. Western Colorado Congress, 130 IBLA 244, 248 (1994), citing Union Oil Co. of California v. Morton, 512 F.2d 743, 750-51 (9th Cir. 1975). In such cases, BLM is required to fashion mitigation strategies and methods to reduce or eliminate adverse impacts. Western Colorado Congress, *supra* at 248; see also DEIS at 28. In these circumstances, a no-action alternative is not a viable alternative, although it may be included in the environmental analysis for comparative purposes. Consequently, there was no "relinquishment" of the obligation to consider no action in the sense urged by Appellants.

To the extent not stated herein, other arguments have been considered and rejected.

Accordingly, pursuant to the authority delegated to the Board of Land Appeals by the Secretary of the Interior, 43 C.F.R. § 4.1, the Decision appealed from is affirmed.

T. Britt Price
Administrative Judge

I concur:

James P. Terry
Administrative Judge